



REPORT NO. 1176
OCTOBER 1962

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AUTOMATIC SELECTION OF DIGITAL ELECTRONIC COMPUTERS (ASDEC)

COUNTED IN

Martin H. Weik
Violet J. Confer
Ralph R. Rosenberg

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STINFO BRANCH
BRL, APG, MD. 21005

Department of the Army Project No. 503-06-002
BALLISTIC RESEARCH LABORATORIES

ABERDEEN PROVING GROUND, MARYLAND

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MWeik/VJConfer/RRRosenberg/vjc
Aberdeen Proving Ground, Md.
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AUTOMATIC SELECTION OF DIGITAL ELECTRONIC COMPUTERS (ASDEC)

ABSTRACT

Engineering and programming condensed descriptions of 327 electronic digital computing and data processing systems in the United States are given in a set of comparative charts, automatically prepared from a deck of punched cards. A method for automatic selection and evaluation of computing and data processing systems is described.

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I. AUTOMATIC SELECTION OF DIGITAL ELECTRONIC COMPUTERS (ASDEC)

ASDEC is a first attempt at proving the feasibility of automating the process of comparative evaluation of electronic digital computing systems. A quantitative and qualitative engineering and programming description of each of 327 computing and data processing systems, that are, or ever have been, operative in the United States, has been condensed and squeezed on two 80 column punched cards. The data have been taken from three computer survey reports prepared by the Ballistic Research Laboratories in 1955, 1957, and 1961, and from recent announcements by manufacturers for those systems which have evolved since the completion of the third survey. The computer descriptions are prepared in accordance with the following outline:

- Official Name of Computer
- Manufacturer's Name
- Manufacturer's Address
- Application
- Quantity of Systems Produced
- Vintage
- Cost of Typical System
- Rental Rate of Typical System
- Programming Languages
- Word Length
- Character Type
- Number of Index Registers
- Add Time (Including Access)
- Multiply Time (Including Access)
- Divide Time (Including Access)
- Add Time (Excluding Access)
- Multiply Time (Excluding Access)
- Divide Time (Excluding Access)
- High Speed Storage Access Time
- High Speed Storage Cycle Time
- High Speed Storage Capacity - Words
- High Speed Storage Medium
- High Speed Storage Capacity - Binary Equivalent
- High Speed Storage Figure of Merit
- Bulk Storage Capacity
- Bulk Storage Medium
- Input-Output Devices
- Magnetic Tape Transfer Rate
- Quantity of Magnetic Tape Stations
- Magnetic Tape Width
- Quantity of Magnetic Tape Tracks/Tape
- Arithmetic Point
- Instructions per Word
- Addresses per Instruction
- Arithmetic Type
- Quantity of Vacuum Tubes
- Quantity of Transistors
- Quantity of Crystal Diodes
- Power Requirement of Typical System
- Size of Typical System
- Weight of Typical System

The comparative table shown in Chapter IV is a print-out of the contents of the 654 cards. The cards can be handled with punch card machinery for sorting, collating, searching or printing on any set of criteria. The contents of the cards can be stored in a computing system and a computer program written to permit evaluation of systems in accordance with a given set of criteria. One such approach might be, for example, to (1) translate the computer application requirement into a set of desired computer programming and engineering characteristics, stating numerical values or ranges of values, and (2) weight each of the characteristics in accordance with their relative importance. These two steps, of course, are accomplished independent of any given system. Then, (3) eliminate all obviously non-competitive systems, such as those developed by government agencies or universities, on the assumption that they are not for sale, if acquisition of a system is intended, (4) write a computer program which will examine each characteristic, assign the weights or fractions thereof, in accordance with a prescribed rule, and accumulate a score for each system, (5) print out, in sequence according to score, the names and the characteristics of all systems and finally, (6) evaluate the relative "scholastic" achievement of each system, as a measure of its ability to cope with the problems of the original application. The only step required to keep ASDEC up to date is to punch a pair of cards for each computing system with the necessary descriptive information. One person in about thirty minutes can select, sort and code the information, and a couple of minutes are required to punch the cards. All further handling is automatic.

1. BRL Report No. 971, A Survey of Domestic Electronic Digital Computing Systems, M. Weik, December 1955,
BRL Report No. 1010, A Second Survey of Domestic Electronic Digital Computing Systems, M. Weik, June 1957,
BRL Report No. 1115, A Third Survey of Domestic Electronic Digital Computing Systems, M. Weik, March 1961.

II. SUMMARY OF ASDEC SYSTEM COLUMNAR HEADINGS

Column	Entry																																																								
A	<u>Name of Computer</u>																																																								
B	<u>Name of Manufacturer</u>																																																								
C	<u>Address of Manufacturer</u>																																																								
D	<u>Nature of Manufacturer, Intended Primary Application, and Quantity of Systems Produced</u>																																																								
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	G - Government																																																								
	U - University																																																								
	2. Primary Application																																																								
	One symbol expresses the intended application																																																								
	<table><tr><th>Special Purpose</th><th>General Purpose</th><th>Use</th></tr><tr><td>1</td><td>C</td><td>Business Only</td></tr><tr><td>2</td><td>S</td><td>Scientific Only</td></tr><tr><td>3</td><td>B</td><td>Business and Scientific</td></tr><tr><td>4</td><td>T</td><td>Scientific, Business, Real Time Control</td></tr><tr><td>6</td><td>M</td><td>Military Real Time Control</td></tr><tr><td>7</td><td>F</td><td>Military Scientific</td></tr><tr><td>8</td><td>L</td><td>Military Business</td></tr><tr><td>9</td><td>A</td><td>Digital Differential Analyzer</td></tr></table>	Special Purpose	General Purpose	Use	1	C	Business Only	2	S	Scientific Only	3	B	Business and Scientific	4	T	Scientific, Business, Real Time Control	6	M	Military Real Time Control	7	F	Military Scientific	8	L	Military Business	9	A	Digital Differential Analyzer																													
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Column	Entry
H	<u>Word Length and Digit Type</u> 1. Word Length Two significant digits express the binary equivalent length and type of digit. 2. Digit Type One symbol expresses the type of characters in the word. A - Alphanumeric Characters B - Binary Digits D - Decimal Digits OPT - Various binary equivalent lengths and types are available
I	<u>Number of Index Registers</u> Two significant digits express the number of index registers. 99 Indicates 99 or more HS Indicates that the entire high speed storage is indexable.
J	<u>Operation Times, Including Access Time</u> Two significant digits plus exponent express the operation time in nanoseconds. 1. Add time 2. Multiply time 3. Divide time
K	<u>Operation Times, Excluding Access Time</u> Two significant digits plus exponent express the operation time in nanoseconds. 1. Add time 2. Multiply time 3. Divide time
L	<u>High Speed Storage Access Time and Cycle Time</u> 1. Access Time Two significant digits plus exponent express the storage access time. 2. Cycle Time Two significant digits plus exponent express the storage cycle time.
M	<u>High Speed Storage Capacity, Medium, and Binary Equivalent Capacity</u> 1. Capacity Three significant digits plus exponent express the number of words. 2. Medium One symbol specifies the storage medium. B Electromagnetic C Core E Electrostatic H Acoustic HG Delay Line M Magnetostrictive Delay Line T Thin Film V Vacuum Tube Q Acoustic Quartz Delay Line R Mercury Delay Line S Register 3. Binary Equivalent Capacity Three significant digits plus exponent express the total number of binary digits.
N	<u>High Speed Storage Figure of Merit</u> $10 \log_{10}$ Total Binary Digit Capacity/Access Time in Seconds Three significant digits express the figure of merit.

O Capacity of Bulk Storage and Medium

1. Capacity

Two significant digits plus exponent express the total number of binary digits.

2. Medium

One symbol expresses the type of storage medium.

G	Disc	T	Magnetic Ledger Cards
J	Drum	P	Potentiometers
K	Magnetic Tape Bin	R	Disc, Drum and Tape
M	Disc and Drum	+	Several Others
N	Disc and Tape	O	Drum and Tape

P Input-Output Devices

Five symbols express the types of input-output devices.

1	Card Reader and Punch	9	Analog to Digital and vice versa
2	Magnetic Tape	D	Microfilm
3	Paper Tape	G	Optical Scanner
4	Printer	S	Registers
5	Cathode Ray Tube	P	Potentiometers
6	Plotter	T	Magnetic Ledger Cards
7	Typewriter and Teletype	+	Several Others
8	Data Link		

Q Characteristics of Magnetic Tape

1. Speed

Two significant digits plus exponent express the alphanumeric characters per second transfer rate.

2. Quantity of Stations

Two significant digits express the number of tape stations that may be connected.

99 implies 99 or more	AB implies 108
AA implies 256	AC implies 512

3. Tape Width

One significant digit expresses the number of eighths of an inch of tape width.

8 implies one inch or wider
A implies 3 inches
B implies 2 inches

4. Number of Tracks

One significant digit or symbol expresses the number of tracks on tape.

A implies 16	E implies 11
B implies 10	F implies 22
C implies 12	G implies 42
D implies 31	H implies 13

R Arithmetic Point, Instructions per Word, Addresses per Instruction, and Type of Digital System

1. Arithmetic Point

One symbol expresses the nature of the arithmetic point.

I	Fixed Point	B	Fixed and Floating Point
O	Floating Point	R	Ring Adder

2. Quantity of Instructions per Word

One digit expresses the number of instructions per word.

H	1/2	V	Variable
---	-----	---	----------

Column Entry

3. Quantity of Addresses per Instruction

One digit expresses the number of addresses in each instruction.

A	1+1	V	Variable
F	1+3	T	1 or 2

4. Type of Digital System

One digit expresses the type of digital system.

0	Asynchronous, Sequential, Serial
1	Asynchronous, Sequential, Parallel
2	Asynchronous, Concurrent, Serial
3	Asynchronous, Concurrent, Parallel
4	Synchronous, Sequential, Serial
5	Synchronous, Sequential, Parallel
6	Synchronous, Concurrent, Serial
7	Synchronous, Concurrent, Parallel

S Component - Tubes, Transistors and Diodes

1. Tubes

One significant digit plus exponent expresses the number of tubes.

2. Transistors

One significant digit plus exponent expresses the number of transistors.

3. Diodes

One significant digit plus exponent expresses the number of diodes.

T Power, Space and Weight of Typical System

1. Power

One significant digit plus exponent expresses the power in watts.

2. Space

One significant digit plus exponent expresses the floor area in square feet.

3. Weight

One significant digit plus exponent expresses the weight in pounds.

III. DETAILED DISCUSSION OF COLUMNAR HEADINGS

A. Name of Computing System

The first column, labelled A, lists the 327 different electronic digital computing and data processing systems that were or are operational in the United States. The name used for the computer is the proper name assigned to the system by the maker. A more detailed and cross-referenced "Thesaurus of the Names of Electronic Digital Computers and Data Processors" is given in BRL Technical Note No. 1472 by M. Weik and V. J. Confer. Care must be exercised in dealing with computer names, since many machines have appeared under several designations or aliases.

B. Name of Manufacturer

The second column, labelled B, in the accompanying master table of electronic digital computing systems, shows that there are 89 known and listed manufacturers or developers of electronic digital computing and data processing systems in the United States. These manufacturers are industrial, governmental, educational and research organizations.

C. Address of Manufacturer

This column is self explanatory.

D. Nature of Manufacturer, Intended Primary Application, and Quantity of Systems Produced

1. Nature of Manufacturer

It sometimes becomes practical to seek and select only those systems which are manufactured by an industrial manufacturer, on the basis that one can thus readily obtain replicas of the system, perhaps as an off-the-shelf item. Occasionally it is interesting to discover all the university or all the government developed systems. A search for a system of particular characteristics can be considerably narrowed by use of this column.

2. Primary Intended Application

This column attempts to classify systems into various categories of application. We are reminded that these are not the only categories, and we must also realize that a machine, although intended for a specific use, may also have many other uses. In our case, a numeral indicates a special purpose application, whereas an alphabetic character indicates a general purpose application. Thus, for example, a 2 implies that the system was designed for a special purpose scientific application, whereas an S indicates the system was intended as a general purpose system to perform scientific calculations. Here again, if one is interested in selection of specific types, one can again restrict the area of consideration through the use of this column.

3. Quantity of Systems Produced

This single digit signifies the approximate quantity of each system that one may expect to find in existence. Quantity, in terms of one, several, dozens, hundreds, and thousands, is not very precise, however, in view of the fact that at least one or two leading manufacturers consider the information to be proprietary, and since the quantity changes daily as production schedules are met, a more precise figure cannot be obtained.

E. Year of Development and/or Initial Operation

Sometimes it becomes difficult to "pin" a year or vintage label on a computing system. The year of concept, development, prototype, advance engineering model, pilot model, internal operation, customer installation and customer acceptance can all be different. The year used in the table is a kind of "effective" or "launching" year, somewhere midway between initial concept and final customer acceptance of a line model.

F. Cost and Monthly Rental

A pair of numbers, each consisting of two significant digits and an exponent, specify the approximate cost of a typical configuration of equipment and the monthly rental rate for one shift of operation. A "typical system" implies one with a nominal amount of balanced storage, two or three input-output devices, perhaps two to four tape stations, and of course, the main frame and necessary power units. However, air conditioners are not included unless they are an integral part of the computing system. The figures in the charts are given in dollars. These are subject to change. It should also be noted that some figures signify cost of completion, for example the U. S. Army's not-for-sale BRLESC system, while other figures indicate the current market selling price.

G. Programming Languages

This column signifies the kind of programming languages, including compilers and symbolic languages that are common to two or more systems. The Z is used to indicate that there is a programming language available or in use with the system in addition to its own machine language, which of necessity, every machine must have. The blank indicates that there are no known programming languages, other than the machine language, in use with the system. Perhaps the greatest significance lies in the availability of COBOL, ALGOL, and FORTRAN.

H. Word Length and Digit Type

It becomes desirable, at times, to identify those systems which have a word length lying within a given range. To suit this purpose, all word lengths are converted to equivalent binary digits. The conversion factors are 3.4 for decimal to binary and 6 for alphanumeric to binary. Thus, a 10 decimal digit word length is equivalent to 34 binary digits, and 8 alphanumeric characters is equivalent to 48 binary digits. In order to describe the nature of the characters comprising the word, they are identified by the given code. Thus, an entry like 34D implies a 10 decimal digit word length. In some instances the word length is optional at time of purchase, thereafter fixed at some selected value. These are defined as variable word length systems. If the word length is never fixed, that is to say, it is operationally variable and thus can be varied according to the will of the programmer, we have concluded that the effective word length is but one character. For an alphanumeric system, the word length thus becomes 06A, or 6 binary digits, comprising a single character.

I. Number of Index Registers

J. Operation Times, Including Access Time

K. Operation Times, Excluding Access Time

L. High Speed Storage Access Time and Cycle Time

The expressions in Columns I-J-K-L are self explanatory and are adequately defined in the columnar headings. These are perhaps the most significant set of columns in the chart, since here one may search for systems which are satisfactory from the standpoint of speed. Nanoseconds are used in order to eliminate the need for negative exponents.

M. High Speed Storage Capacity, Medium, and Binary Equivalent Capacity

The high speed storage capacity is expressed in words with two significant digits and an exponent. The fourth character codes the nature of the storage medium. Perhaps the only real measure of storage capacity is the total number of equivalent binary digits that can be stored. Thus a 4,096-word, 68-binary-digits-per-word storage is of greater capability or capacity than an 8,192-word 24 binary-digits-per-word storage unit. Whether the stored characters are binary digits, decimal digits, or alphanumeric characters is also of significance. The ability to store a given number of alphanumeric characters represents a greater capability than the ability to store the same number of decimal digits. Here again the weighting factors of 3.4 and 6 are used for decimal digits and alphanumeric characters. Thus, the total equivalent binary storage capacity is the triple product of the number of words, the number of characters per word and the weighting factors. In cases where the storage capacity is optional to the buyer, the largest capacity available is cited.

N. High Speed Storage Figure of Merit

The high speed storage figure of merit given in the next column, attempts to serve as a rating factor for high-speed storage units. One is often in a position to trade space for time. In other words, time can be saved if an additional investment is made in hardware. An outstanding example of this "trade-off" is found in the parallel versus serial arithmetic unit, viz., handle all digits at once with more hardware and save time, or one digit at a time, with less hardware, but require much more time. The figure of merit puts space or total equivalent binary capacity in the numerator and the access time in seconds in the denominator. Since the ratio reaches 12 figures, it becomes practical to look only at the logarithm, and, to avoid the use of a decimal point, the logarithm of the ratio is multiplied by 10.

O. Capacity of Bulk Storage and Medium

Some estimate should be made of the capacity of bulk storage, auxiliary storage, back-up storage, or slow-speed storage. Here we mean the electromechanical storage type of media like disc, drums, tape bins, etc. The dollar cost is less but it is costly in terms of time. Comparison between systems is facilitated by converting all capacities into total binary equivalent capacities as in the case of high speed storage. Two significant digits and an exponent, along with the code symbol which cites the medium, are given.

P. Input-Output Devices

Computing systems come with a myriad of input-output devices. It is possible to associate almost any type of input-output device with almost any electronic digital computing system. If one insists on an optical scanner to read printed alphabetic data directly into an IBM 7090, it is no doubt quite possible.

However, it is interesting to list only those devices which are normally found with a particular system, those which the manufacturer supplies as a standard piece of equipment. These have been coded and five are listed with each system. If more than five standard input-output devices are available, four are cited and the symbol + is used to signify that there are others, too numerous to list in the space available. The existence of a + sign implies that there are a prodigious assortment of input-output devices that are available for use with the system and that the necessary output channels and trunks are provided in the standard model of the system.

Q. Characteristics of Magnetic Tape

By far the standard or normal computer appears to be one constructed with core storage, backed up by drums and/or magnetic tape. We treated of drums in Column O. This column specifies the detail characteristics of magnetic tape. The columnar headings are self explanatory.

R. Arithmetic Point, Instructions per Word, Addresses per Instruction and Type of Digital System

These items are self explanatory. It should be recalled here, however, that the execution time for an instruction (Columns J and K) must be evaluated in view of the addressing scheme. Thus, for one machine to execute a one-address instruction in less time than for another machine to execute a complete three-address instruction is not necessarily indicative that the former is faster than the latter.

S. Components - Tubes, Transistors, and Diodes

If one is searching for and finds those systems which meet a given set of criteria, perhaps it might be interesting to note the component counts. These figures may be indicative of reliability, size, power requirements, vulnerability, weight, or they may simply indicate the magnitude of the equipment being demanded. Looking at the mean and extremes of the component count, one might determine, for example, as a practical matter, that in order to accomplish the desired task or meet the stated requirement, a certain component count is demanded. A system with very much fewer components may be looked upon with suspicion as not fitting the bill, one with very much more than a "normal" number of components may be overdesigned, have too many frills or undesired capabilities. The suspicion, of course, must be investigated.

T. Power, Space and Weight of Typical Systems

The power does not include air conditioning unless it is an integral part of the system. The space includes access aisles for large, multi-component systems, but only the occupied floor or bench area for small systems. In many instances, especially for the smaller systems, the weight does not include the peripheral or input-output devices.

IV. ASDEC INPUT DATA

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	
ABEL ADDRESSOG 900 ADEC AF CRC ALWAC 11	GEORGEWASH UNIVERS ADDRESSOGRAPHMULTI HARVARD UNIVERSITY REMRAND UNIVAC DIV ALWAC COMPUTER DIV	707 22STNW WASHINGTON 7 DC 12008ABBITRD CLEVELAND OHIO CAMBRIDGE MASSACHUSETTS 315 PARK AV S NY 10 NY. 13040SCERISEAV HAWTHORNECALIF	US162 IC 62 US151604 IS156804 IS254503							55D 445136 35D 903105 33B					444J2 753J357 703J37			113453 1 421 145243 IV1432 43433123	234423 145243 43433123	
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ANASQ 28V EDC ANASQ 28V MDC ANASQ 54 ANFSQ 1 ANFSQ 7 SAGE	INT BUS MACH CORP INT BUS MACH CORP LITTON SYSTEMS INC LITTON SYSTEMS INC INT BUS MACH CORP	590 MADISON AV NY 22 NY 590 MADISON AV NY 22 NY 6700ETONAVE CANOGAPARK CALIFIM 62 6700ETONAVE CANOGAPARK CALIFIM 62 590 MADISON AVE NY 22 NY	I2 57 I2 57 IM 62 IM 62 I7357							26B 23B	624375375 243264294	164335335 243264294	243	973J589 594J4589				11A4 1117	624332 231482 81 32	
ANFSQ 8 SAGE ANFSQ 31V ANFSQ 32V ANMJQ 1 REDSTO ANMSM	INT BUS MACH CORP INT BUS MACH CORP INT BUS MACH CORP AUTONETICS CORP SPERRY GYROSCOPE C	590 MADISON AVE NY 22 NY 590 MADISON AV NY 22 NY 590 MADISON AV NY 22 NY 9150EIMPERIALHWY DOWNEYCALIF GREAT NECK LI NY	I7357 IB258 IB258 I7 58803 IM162							ZZZ Z Z	32B04 50B08 50B08 56B02	123163603 153383603 153383603 2405	3602103603 153383603 153383603 573	3602 252 252 573	6962C2254 1313C6554 1643C8194 4101G 0160S8950072	116 124 125 174G357 2914J357	445J12458 4232447B 6232447B 00	1930847 1115 1115 114	547225 752455 1525157215 2535159215 133012 131192	
ANTYK 4V COMP ANTYK 6V BASIC ANTYK 7V INFOR ANTQ 1 ANTQ 2	PHILCO CORPORATION PHILCO CORPORATION INT BUS MACH CORP LITTON SYSTEMS INC LITTON SYSTEMS INC	3900WELSHRD WILLOW GROVE PA 3900WELSHRD WILLOW GROVE PA 590 MADISON AV NY 22 NY 6700ETONAVE CANOGAPARK CALIFIM 62 6700ETONAVE CANOGAPARK CALIFIM 62	IM160 IL259504 IL 61 IM 62 IM 62							Z M	38B 38B07 38B04	243254254 243244244 213394424	123 123 802	4101C1553 4101C1563 4101C1553	101 101 103	37 2567 147G237	233088A 453568A 233168A	1114 1114 1115	143343 1492248143 1463324042	
ANUJQ 2 XA 1 ANUSQ 20 ANUYK 1 ASC 15 ASI 210	HRB SINGER INC REMRAND UNIVAC DIV TR WOOLDRIDGE INC INT BUS MACH CORP ADV SCI INSTRUMENT	SCIENCE PARK STATECOLLEGE PA 315 PARK AV S NY 10 NY 8433FALLBROOKAVCANOGAPARKCALIM 62 590 MADISON AV NY 22 NY 5249HANSONCTMINNEAPOLIS22MINIT	IM 62 IF160 IM 62 IM 59 IM 261							Z	30B07 15B03 27B 21B03	163743114 123573573 314205 3602503623	962743114 302602 164195 202463563	802 102 102 102	3282C9833 3282C4923 3282C1374 3282C1374 2560C6141082 5120E2052087	111 112 121 121 144J 3	23479 1237 12347 124 4820147 112J7	2130447 1324 1324 6233247	1111 1113 1324 1117	1434333123 622052 12 12 233113
ASI 420 ASI ADVANCE 11 ATHENA AVIDAC BAR COL DEC DI	ADV SCI INSTRU INC ADV SCI INSTRU INC REMRAND UNIVAC DIV ARGONNE NATION LAB BARBER COLMAN CO	5249HANSONCTMINNEAPOLIS22MINIT 5249HANSONCTMINNEAPOLIS22MINIT 315 PARK AV S NY 10 NY UNIV OF CHICAGO LEMONT ILL ROCKFORD ILL	IM161 IM162 I7 61 US150 IB 56							F2	42BHS 42BHS 24B 40B 68D	602603963 402333 403524105403 503165165 605207207	202563903 102202 403524105403 183155155353 605207207	102 102 102 353	3282C1374 3282C1374 2560C6141082 5120E2052087	121 121 1234 3	12347 6233247 124 6233247 4820147 112J7	7B117005354 7B11700 7B11700 121233 24 I 3442 132321	338123 632123 534224 24 132321	
BENDIX CUBIC BENDIX D12 BENDIX G15 BENDIX G20 BENDIX G21	BENDIX CORPORATION BENDIX COMPUTER DI BENDIX CORPORATION BENDIX CORPORATION BENDIX CORPORATION	5630ARBORVITA EAV LOS A45 CALIF 5630ARBORVITA EAVLOSANG45CALIFIA 5630ARBORVITA EAV LOS A45 CALIS456493152Z 5630ARBORVITA EAV LOS A45 CALIT 57484123SLIZ 5630ARBORVITA EAV LOS A45 CALIS 61964243SLIZ	60 54553 IS456493152Z IS 57484123SLIZ 61964243SLIZ								29B 27D 29B 33B63 33B99	433 544955955274 273703114 273703114	842 842	3282C1084 9832C3244	111 116	12348 12348	603NL8B0 603NL8B0	117229344 0117623415	431142 23834123 336013 331123 933163	
BOGART BRLESC BURROUGHS B250 BURROUGHS B251 BURROUGHS B260	REMRAND UNIVAC DIV BALLISTIC RES LABS BURROUGHS CORP BURROUGHS CORP BURROUGHS CORP	315 PARK AV S NY 10 NY ABERDEEN PROVING GROUND MD 6071SECONDAV DETROIT 32 MICHIC 62 6071SECONDAV DETROIT 32 MICHIC 62 6071SECONDAV DETROIT 32 MICHIC 62	IS156 GF161295 IM 62 IM 62 IM 62							FJ	68B63	502253653 102203603 451142	4010C 2462C1674	125 175J	237 1		124288A8317 639315 342334			
BURROUGHS B270 BURROUGHS B280 BURROUGHS B285 BURROUGHSB280 BURROUGHS D103	BURROUGHS CORP BURROUGHS CORP BURROUGHS CORP BURROUGHS CORP BURROUGHS CORP	6071SECONDAV DETROIT 32 MICHIC 62 6071SECONDAV DETROIT 32 MICHIC 62 6071SECONDAV DETROIT 32 MICHIC 62 6071SECONDAV DETROIT 32 MICHIC 62 6071SECONDAV DETROIT 32 MICHIC 62	IM 62 IM 62 IM 62 IM 62 IM 58								48B 20B	113403663 502653803	202313573 502	302 502	3282C1574 0200C4000079	117 315J 1467 372J	6731647 78406001415 011523 1434	649224		

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
BURROUGHS D104	BURROUGHS CORP	6071SECONDAV DETROIT 32 MICHIM357						52B			302	5120C1642067	983JA				6734324	649244	
BURROUGHS D105	BURROUGHS CORP	6071SECONDAV DETROIT 32 MICH16 58											38				4		
BURROUGHS D107	BURROUGHS CORP	6071SECONDAV DETROIT 32 MICH15 60						34807	403234434		202133	1642C5563106	379				1114	3314	132022
BURROUGHS D201	BURROUGHS CORP	6071SECONDAV DETROIT 32 MICHIM159						218	253753753	302563683	252	1280C2691090	833J8				1115	607359	23032
BURROUGHS D202	BURROUGHS CORP	6071SECONDAV DETROIT 32 MICHIM161						228	103403803	302343733	202	5120C1132097	214J8				1115	5314	234022
BURROUGHS D203	BURROUGHS CORP	6071SECONDAV DETROIT 32 MICH15 61						248	863305305	863305305			164J8				11A4	6373	921162
BURROUGHS D204	BURROUGHS CORP	6071SECONDAV DETROIT 32 MICH1F259164						298	113693114	203623104		1791C3352	59				113	8314	234013
BURROUGHS D208	BURROUGHS CORP	6071SECONDAV DETROIT 32 MICHIM 62						24802	263704754	263704754	202	7680C1432099	8				1114	2373	223031
BURROUGHS D209	BURROUGHS CORP	6071SECONDAV DETROIT 32 MICH19 60						168	323			0810C1301	9				1H 4	7223	1011
BURROUGHS D825	BURROUGHS CORP	6071SECONDAV DETROIT 32 MICH1S162295						48850			102	1283C6154128							
BURROUGHS E101	BURROUGHS CORP	6071SECONDAV DETROIT 32 MICH18455383102						41D	506257257		173		262J137				1114	220023	332123
BURROUGHS E102	BURROUGHS CORP	6071SECONDAV DETROIT 32 MICH18459283112						41D	506257257		173		262J137				1114	22	2332113
BURROUGHS E103	BURROUGHS CORP	6071SECONDAV DETROIT 32 MICH18457303871						41D	516257307	426247297			902J1347				114	22	23232113
BURROUGHS 204	BURROUGHS CORP	6071SECONDAV DETROIT 32 MICH18454154202ZZZZ						34D	115935136	855126			154J12347	602106C			1114	13	43243133
BURROUGHS 205	BURROUGHS CORP	6071SECONDAV DETROIT 32 MICH18454134392ZZZZ						34D	115935136	855126			154J12347	602106C			1114	13	43243133
BURROUGHS 220	BURROUGHS CORP	6071SECONDAV DETROIT 32 MICH1C359324782BZZZ						34D	204215405	184215405	153	1002C3743104	12347	253106C			1114	23	543234
CALDIC	UNIV OF CALIFORNIA	DIV OF ELEENG BERKELEY 4 CALIFUS156124						34D	405166	644166			502J13				1124	13	13632223
CAT 400	MNEMOTRON CORP	45 S MAIL ST PEARL RIVER NY 12362133						03D	363		303	4000C7632	3478				114	1021	412041
CCC DDP 19	COMPUTER CONT CO	2251BARRYAV LOSANGELES64 CALIT162204						19B01	103393663	302363573	252502	4101C7762105	12347	62316 7			1115		238023
CCC REAL TIME	COMPUTER CONT CO	2251BARRYAV LOSANGELES64 CALIS159334						25B03	253753	253503	374	3200Q8001072	3457				11A4	3324	421123
CCC TIME COMP	COMPUTER CONT CO	2251BARRYAV LOSANGELES64 CALIP162						10B00			105	2001M2002073	89E				115		124022
CCC210 DIG DC	COMPUTER CONT CO	2251BARRYAV LOSANGELES64 CALIA 62																	
CDC 160A	CONTROL DATA CORP	501PARKAV MINNEAPOLIS15 MINNIP 62																	
CDC 1604	CONTROL DATA CORP	501PARKAV MINNEAPOLIS15 MINNIP 62						48B06	722253653		483	3282C1574105	12347	3032447			1217	003415	835313
CDC 3600	CONTROL DATA CORP	501PARKAV MINNEAPOLIS15 MINNIP 62						48B	402402702		152	2623C							
CDC 6600	CONTROL DATA CORP	501PARKAV MINNEAPOLIS15 MINNIP 62																	
CIRCLE	HOGAN LABS INC	155 PERRY ST NY 14 NY IS254803						44B		504206206			19407				1214	92	33 23
COLLINS C8200	COLLINS RADIO	COMM DATA SYS DIV DALLAS TEXIP162										3282							
COLLINS C8400	COLLINS RADIO	COMM DATA SYS DIV DALLAS TEXIP162										6552							
COMCOR	APPLIED DYNAM CORP	2275 PLATT RD ANN ARBOR MICHID 62																	
CORBIN	THE CORBIN CORP	5419 56TH PLACE RIVERDALE MDIS157						54D		163323234	802	3601C5462104	2				8136		
CUBIC AIR TRAF	CUBIC CORPORATION	5575KEARNYVILLARDSANDIEGOCALIM160						20B	254254	254254		203J58					114	4	3323
CUBIC TRACKER	CUBIC CORPORATION	5575KEARNYVILLARDSANDIEGOCALID260						218H	203	103	214	0640T1281068	7			1530147	114	4132313	134123
CYCLONE	IOWA STATE UNIV	JAMES IOWA US156						40B	104994125	703964125	303	1021E4102091	34				1211	23	246153
DATAKEEPE 1000	FORD INSTRUMEN DIV	31-10THOMSONAV LONG IS C INYIC155						34D	336	334		102J13457					1162	22	7213 62
DATAMATIC 1000	MINN HONEYWELL REG	2753 4AVS MINNEAPOLIS 8 MINNIB359225463						41B	234105235	583834215	123	2001C8162098	1234	40399AD			1134	435264	945274
DE 60	CLARY CORPORATION	408JUNIPEROST SANGABRIEL CALIB360183						62D	606227207	305147167		992J1347					114	122231	23132
DIANA	LAB FOR ELECTRONIC	1079COMMONWEALTHAVBOSTON MASIC160						06A	564315485	194265435	343	1002C3402090	377J347				1125	13	64941324
DIG CORREL 580	BAIRD ATOMIC INC	33UNIVRD CAMBRIDGE 38 MASS IS156673						18B		903		222J48					114	413	134321
DIGITRONIC COND	DIGITRONICS CORP	ALBERTSON AV ALBERTSON NY I1261									203	1021C6141085	237	15302 B					
DISTRIBUTAPE	MONROE CAL MACH CO	555 MITCHELL ST ORANGE NJ I1261453122											J3				4126	123	239042
DYSEAC	NATIONAL BUR STAND	CONNECTICUT VANNESAV WASHDCID154						45B	864305305	483215215	224	5120R2462087	23576				1136	92	24143223
EDVAC	UNIV OF PENNSYLVAN	MOORE SCH ELEC ENG PHILA PA UF149474						44B	864295295		224	1021R4502090	204J1235			0758	8144	633214	535224
ELECOM 50	UNDERWOOD CORP	1 PARK AV NY 16 NY IC256223601						35D		654396	654	352J347					114	220023	232172
ELECOM 100	UNDERWOOD CORP	1 PARK AV NY 16 NY IS252603						30B	203			153J37					1134	22	23331200
ELECOM 120	UNDERWOOD CORP	1 PARK AV NY 16 NY IS256973352						28D		334186196		284J237					8134	42	43532233
ELECOM 120A	UNDERWOOD CORP	1 PARK AV NY 16 NY IS254973						35D		334186196		345J237					8124	42	4363 33
ELECOM 125	UNDERWOOD CORP	1 PARK AV NY 16 NY IB255104422						35D		334186196		345J12347					1124	42	2363 43
ELECOM 125FP	UNDERWOOD CORP	1 PARK AV NY 16 NY IC256454952						35D	355226226	334226226		354J12347					8124	42	23535183
ENIAC	UNIV OF PENNSYLVAN	MOORE SCH ELEC ENG PHILA PA UF146754						35D		204286247	604	1200C4080061	1				151	2473	2523

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
EPSCO 275 FADAC FLAC FLAC I II FOSDIC	EPSCO INC AUTONETICS DIV US AIR FORCE RADIO CORP AMERICA NATIONAL BUR STAND	275MASSAV CAMBRIDGE 39 MASS 9150EIMPERIALHWY DOWNEY CALIIM PATRICK AIR FORCE BASE FLA CAMDEN 2 NJ CONNECTICUT VANNESSAV WASHDC	IT 61 IM 60 GS153504 IB153504 CG1259124			36B00252153273 35B 45B 854335335 45B 244245245					123 782 182 302	1632C2952 144G2347+ 5120R2302080 4101C1843108	107 925J 12348 236 237 2D		30 5 5 1144 113 1135 133323	5 5 1144 13 33 3323		72 22 24736113 24441324 5332	
GE 100 GE 210 GE 225 GE 250 GE 304	GENERAL ELECTRI GENERAL ELECTRI GENERAL ELECTRI GENERAL ELECTRI GENERAL ELECTRI	CO13430NBLACKCANYHWY PHOENIXAR CO13430NBLACKCANYHWY PHOENIXAR CO13430NBLACKCANYHWY PHOENIXAR CO13430NBLACKCANYHWY PHOENIXAR CO13430NBLACKCANYHWY PHOENIXAR	IC11359 IC259224 IB 60204402Z IB 62 IB 62		GZZ 20B	24D 20D 20B					323 323 203	4001C9522 8001C1633097 1642C3283	105 12347 102334J	2347 403136E 1234+1536447B	1116 1114 11433			152324 145114 141393	
GE 312 GE 412 GEORGE GEOTECH AUTOMAGE GEN MILLS ADE	GENERAL ELECTRI GENERAL ELECTRI ARGONNE NAT LABOR GEOTECH AUTOMAGE GENERAL MILLS	CO13430NBLACKCANYHWY PHOENIXAR CO13430NBLACKCANYHWY PHOENIXAR 9700SOUTHCASSAV ARGONNE ILL 3401 SHILOH RD GARLAND TEX 1620CENAV MINNEAPOLIS13 MINNIC	IC260853 IC260853 GS157504 IC260853 IC260853		ACZZ Z	20B 20B01403 40B16					194205265 203 502263273	963195255 203 752	8191C1643099 4101C1723104	105J 175J 23457 C	1379 347 04GB8V4323246354 1211	1144 111700 04GB8V4323246354 1314	3323 8342 3323246354 1314	433133 8342 13 32 131162	
GEN MILLS APSA GUIDANCE FUNCT HAMP SH CCC 500 HAMP SH TRT 932 HONEYWELL 290	GENERAL MILLS NORTHROP AIRCR INC HAMP SHIRE ENG CO HAMP SHIRE ENG CO MINN HONEYWELL CO	1620CENAV MINNEAPOLIS13 MINNIC NORTHROP FLD HAWTHORNE CALIFIS 2300WASHSTNEWTONLOWFALLSMASSI 2300WASHSTNEWTONLOWFALLSMASSI 2753 4THAVS MINNEAPOLIS8MINN	IC160 IS156 IC2158803 IC2158803 IS158174			36B 42B 20B 22B 18B					124155166 105346346 434855805 224185535224185535 104764135	124155166 105346346 434855805 224185535224185535 203	5120C1842093 893J 0090C1980 0150S3300 4101C7372096	7 37 236 28 154J	1220247 11432 1622 1661923313 B115	1216 432 622 661923313 1393	1324921152 43832133 131370 131370 1380		
HONEYWELL 400 HONEYWELL 800 HONEYWELL 1800 HRB SINGER HUGHES AA 111	MINN HONEYWELL CO MINN HONEYWELL REG MINN HONEYWELL CO HRB SINGER INC HUGHES AIRCRAFT CO	2753 4THAVS MINNEAPOLIS8MINN 27534THAVS MINNEAPOLIS8 MINNIC 2753 4THAVS MINNEAPOLIS8MINN SCIENCE PARK STATECOLLEGE PAIC FLORENCE TEALESTCULVERCITYCA	61 60984213 62 260153401 59		ZZZ C1ZZ 16B 17B	48B 72243164454 99802123 204175175					212 102202 3282C1574	3202C3843 3282C1574	118 122 163J28 383J9	134 G1234B893 12452	643646A B137 12452	6334 B137 3313	341324 112081 13 21		
HUGHES BM GUID HUGHES D PAT HUGHES DIGITA HUGHES LRI X HUGHES M252	HUGHES AIRCRAFT CO HUGHES AIRCRAFT CO HUGHES AIRCRAFT CO HUGHES AIRCRAFT CO HUGHES AIRCRAFT CO	FLORENCE TEALESTCULVERCITYCA FLORENCE TEALESTCULVERCITYCA FLORENCE TEALESTCULVERCITYCA FLORENCE TEALESTCULVERCITYCA FLORENCE TEALESTCULVERCITYCA	17 60 17 61 17 60 17 60 17 60		Z Z	19B 17B 19B 20B					624 843165165843 214195195104195195 843175175843165165 264115215883974195	624 843165165843 214195195104195195 843175175843165165 264115215883974195	0030C0570058 774J39 T 9	9 39 T 9	1134 1134 113 121	2353 42 43 23 82 134342	311021 322123 32 22 81		
HYDAC IAS IBM CPC IBM 305 IBM 604	ELECTRONIC ASSOCIA INST FOR ADV STUDY INT BUS MACH CORP INT BUS MACH CORP INT BUS MACH CORP	LONG BRANCH NJ ELECT COMP PROJ PRINCETON NJ 590 MADISON AV NY 22 NY 590 MADISON AV NY 22 NY 590 MADISON AV NY 22 NY	IC 62 US152 IB449753222 IC 58194322R IB553263641			40B 17D 06A 17D					7037041154 764136156764 306127237 504146176504	403674115305 764136156764 306127237 504146176504	1024E4101092822J 0090V1260052 127G123471530747 0090V1260054	1 14 127G123471530747 1		121153 17513 2023 17513	42 936163 42142224 732123		
IBM 607 IBM 608 IBM 609 IBM 610 IBM 632	INT BUS MACH CORP INT BUS MACH CORP INT BUS MACH CORP INT BUS MACH CORP INT BUS MACH CORP	590 MADISON AV NY 22 NY 590 MADISON AV NY 22 NY 590 MADISON AV NY 22 NY 590 MADISON AV NY 22 NY 590 MADISON AV NY 22 NY	IB450 132 IB258 162 IB 57553122 IB354 112 IC 58123301			17D 31D 41D 52D 41D					524136166524 224116136224 224146186 287128128 213437 213	524136166524 224116136224 224146186 287128128 213437 213	0370V9961063 0400C1122067 0320C1292 892J3 137	1 1 1 892J3 137	17533 175 26 2353 8 1 1 1012	141133 233123 131113 131172 1274062			
IBM 650 IBM 701 IBM 702 IBM 704 IBM 705 I II	INT BUS MACH CORP INT BUS MACH CORP INT BUS MACH CORP INT BUS MACH CORP INT BUS MACH CORP	590 MADISON AV NY 22 NY 590 MADISON AV NY 22 NY 590 MADISON AV NY 22 NY 590 MADISON AV NY 22 NY 590 MADISON AV NY 22 NY	IB554114242PQZZ IB353234502Z IB353364692HZ IB458524972FT IB457594143FHZ		PQZZ 35D03 06A 36B03543134144 06A	35D03 36B 06A 36B03543134144 06A					294106126963 243444444123 233 123 173	294106126963 243444444123 233 123 173	0600C2101073216R134 4101C1473101594J1245 1002C6002095364J1247 3282C1184110594J1245 4002C2403101364J1247	073216R134 101594J1245 095364J1247 110594J1245 101364J1247	0647B114 1531047121543 153104711414 1531047B116 1531047116	130043 14842324 2474 34 84 24 742334			
IBM 705 III IBM 709 IBM 1401 IBM 1410 IBM 1620	INT BUS MACH CORP INT BUS MACH CORP INT BUS MACH CORP INT BUS MACH CORP INT BUS MACH CORP	590 MADISON AV NY 22 NY 590 MADISON AV NY 22 NY 590 MADISON AV NY 22 NY 590 MADISON AV NY 22 NY 590 MADISON AV NY 22 NY	IB357215433HFZZ IB457265553FU IC560134252Z IB460 IS 59214542FZZ		HFZZ FU 06A03304205225 06A15 34D	06A 36B03543134144 06A03304205225 06A15 34D					963774325 3543134144 304205225 452 964186176	963774325 3543134144 304205225 452 964186176	8002C4803107366J1247 3282C1184110594J1234 1602C9602099127G1234 4002C2403107127G1234 6002C2043100137	107366J1247 110594J1234 127G1234 107127G1234 137	6236047116 1534847B115 6330647IV24 6231047 124	16 7314736173 7 3313	152344 151334 736173 14 232113		
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
IBM 7030	INT BUS MACH CORP	590 MADISON AV NY 22 NY	IB260		FHKZ	64B16				142262942	132502	2623C1685	131	438G12475	623AA46	B172	25	152374	
IBM 7040	INT BUS MACH CORP	590 MADISON AV NY 22 NY	IT 61245353		CFZZ	36B03163403543	891			402		3282C11841	151	178G12348	9035047	I11500		1451	
IBM 7044	INT BUS MACH CORP	590 MADISON AV NY 22 NY	IT 61175263		3FZZ	36B03502303503	831			122		3282C11841	201	178G12348	9035047	B11500		1451	
IBM 7070	INT BUS MACH CORP	590 MADISON AV NY 22 NY	IB 60814173		HF	35D99723115904				602		9991C3503	108	177G1247	6234047	B117		242324	
IBM 7072	INT BUS MACH CORP	590 MADISON AV NY 22 NY	IS 61874173			34D99123403643				283523	602	3002C1024	112		127	2032047	B11300	737193	
IBM 7074	INT BUS MACH CORP	590 MADISON AV NY 22 NY	IB 61135293		FHZZ	35D99103563703				402		9991C3503	109	177G1247	6234047	B16		34 24	
IBM 7080	INT BUS MACH CORP	590 MADISON AV NY 22 NY	IB 61225483		HFZZ	06A 133144214				222		1603C9603	116		1247	6235047	I 16	44	141324
IBM 7090	INT BUS MACH CORP	590 MADISON AV NY 22 NY	IB46029563		FUZ	36B03432183203				222		3282C11841	117		124	6238047	B117		632334
IBM 7094	INT BUS MACH CORP	590 MADISON AV NY 22 NY	IB 62295643		CFZZ	36B07402702103331				102		3282C1054	117		124	1748088	B117		
IBM 7950	INT BUS MACH CORP	590 MADISON AV NY 22 NY	IB 62																
ILLIAC	UNIV OF ILLINOIS	DIGITAL COMP LAB URBANA ILL	UB152304			40B 933764954				403724904	273	1021E41020	092	514J3457					
INTELEX AIR RE	INTELEX SYSTEMS INC	67 BROAD ST NEW YORK 4 NY	IC260			34D09953				853	103	1002C3403	105	5350347		513488F	I114		
ITT BANK LN PR	ITT LABORATORIES	500WASHINGTONAV NUTLEY 10 NJ	IC161		203ZZ	41D 174884				174884	602	1000C4081	0884	14J2347		303AB8F	I115	1434	638143
ITT SPES 025	ITT LABORATORIES	500WASHINGTONAV NUTLEY 10 NJ	IB161105		Z	33BAA163				302	802	1642C5403	108	225J12454		1531647	I111	5454	341234
JOHNNIAC	THE RAND CORPORAT	1700MAINST SANTAMONICA CALIF	IS154			40B 253404404				103394394	153	4101C1633	100	494J14					
JUKEBOX	AUTONETICS DIV	9150EIMPERIALHWY DOWNEYCALIF	IB259		Z	40B 965206206				544116116				174G245					
LEEDS NOR 3000	LEEDS NORTHROP CO	4901STENTONAV PHILA 44 PA	II 60			21B 914365365				134275275				364J379					
LEPRECHAUN	BELL TELE LABS INC	WHIPPANY NJ	17156			17B 403374524					802203	1021C1842	094		37				
LGP30	LIBRASCOPE DIV	808WESTERNNAV GLENDALE1 CALIF	IB454		503112Z	32B 205176176				254176176				133J1346+					
LIBRA AIR TRAF	LIBRASCOPE DIV	808WESTERNNAV GLENDALE1 CALIF	IB259			27D 323374384				223364374	103	4001C1093	100	695J789F		3033247	I114	2413	332133
LIBRA ASN 24	LIBRASCOPE DIV	808WESTERNNAV GLENDALE1 CALIF	IF259			25B 624425445				164395415				643J8					
LIBRA CP 209	LIBRASCOPE DIV	808WESTERNNAV GLENDALE1 CALIF	IF357			14B 593593184				593593184				39					
LIBRA L70	LIBRASCOPE DIV	808WESTERNNAV GLENDALE1 CALIF	IFM 62																
LIBRA MK 38	LIBRASCOPE DIV	808WESTERNNAV GLENDALE1 CALIF	IF358			18B								124J389					
LIBRA MK 130	LIBRASCOPE DIV	808WESTERNNAV GLENDALE1 CALIF	IF160			19B01403234254				163214234	203	4101C7772	096		389				
LIBRA 407	LIBRASCOPE DIV	808WESTERNNAV GLENDALE1 CALIF	IF260			22B				104205405				663J89					
LIBRATROL 500	LIBRASCOPE DIV	808WESTERNNAV GLENDALE1 CALIF	IB460843		Z	31B 775236236				254156156				134J3789					
LIBRATROL 1000	LIBRASCOPE DIV	808WESTERNNAV GLENDALE1 CALIF	IB 60		Z	32B01105176176				254166166				264J3467E					
LINCOLN CG 24	LINCOLN LABORATORY	MASSINSTECH LEXINGTON73 MASS	U7158105			25B 243843843				123743743	123	8191C2223	103		237A	1530747			
LINCOLN M TEST	LINCOLN LABORATORY	MASSINSTECH LEXINGTON73 MASS	US154			16B 602403743				202363703	2025624	4101C6252	095	394J1235					
LINCOLN TX 0	LINCOLN LABORATORY	MASSINSTECH LEXINGTON73 MASS	U7159			18B 602105105				102105105	302602	6552C1184	116		357				
LINCOLN TX 2	LINCOLN LABORATORY	MASSINSTECH LEXINGTON73 MASS	US158		Z	38B64482143503				142113463	222	6962C2644	121		35679	373AC6B	I117	826453	2432
LITTON C7000	LITTON INDUSTRIES	5500CANOGAAV WOODLANDHILLSCALIF	58			21B03402263463				202234234	202	1281C2822	098	284J37					
LITTON DATA AS	LITTON INDUSTRIES	5500CANOGAAV WOODLANDHILLSCALIF	11 60			32B 123813813				602693693	602	1021C3282	097	623J589					
LITTON 20 40	LITTON INDUSTRIES	336NFOOTHILLRD BEV HILLS CALIF	IS153153			18B								583J5689					
LOGISTICS	ENG RESEAR ASS INC	DIV REMRAND MINNEAPOLIS MINN	IF153354			41D 504754					114	0150V61200	068	125J13					
MAGLOC I	SPERRY GYROSCOPE CO	GREAT NECK LI NY	IM 62																
MAGNEFILE B	ELEC CORP AMERICA	BUS MACH DIV CAMBRIDGE42MASS	11154203			27D				157				114J7					
MAGNEFILE D	ELEC CORP AMERICA	BUS MACH DIV CAMBRIDGE42MASS	11153503			99D				107				125J7					
MANIAC I	UNIV OF CALIFORNIA	POBOX 1663 LOS ALAMOS NMEX	US152254			40B				803105105	123	1021E41020	097	404J2347					
MANIAC II	UNIV OF CALIFORNIA	POBOX 1663 LOS ALAMOS NMEX	US157354		V	48B				184304	184304552	1642E8003	102	153J12347					
MANIAC III	UNIV OF CHICAGO	INST COMP RES CHICAGO 37 ILL	US160			48B08483713813				423653753	102	8191C3930	116		2347	3730448	B0123	1424	236162
MELLON INSTITU	UNIV OF PITTSBURGH	MELLONINSINDRE PITTSBURGH PA	US154			64B 506506157				654				105J37					
MERLIN	BROOKHAVEN NAT LAB	UPTON NY	GS160604			48B 802144334				352134324	4602	8191E4003	108		2347				
MIDAC	UNIV OF MICHIGAN	ENG RES INST YPSILANTI MICH	US155			45B				483225225	483	5120Q2302	087	703J2357					
MINIAC	MARCHANT RESEA INC	OAKLAND 8 CALIF	IS153853			34D				304146156				233J3					
MINIAC C II	MARCHANT RESEA INC	ELEC DIV OAKLAND 8 CALIF	IS155853			35D				116246266	454146156			144J378					
MISTIC	MICHIGAN STAT UNIV	EAST LANSING MICH	US157			40B				104105115	803984115	1742C6963	105		1357				
MOBIDIC	SYLVANIA ELEC PROD	100 FIRST AV WALTHAM MASS	IL158			38B				163503154		4101C1563	103		237				
MOBIDIC A	SYLVANIA ELEC PROD	100 FIRST AV WALTHAM MASS	IL160		MZ	38B04163863883				802783883	802	8191C3283	108		137	4536348	I125	3463	342214

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A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
MOBIDIC B	SYLVANIA ELEC PROD	100 FIRST AV WALTHAM MASS	IL160		MZ	38B07	423883	343803	802	8191C3283	106	506G137	4536348	1125	3463347214				
MOBIDIC CD-7A	SYLVANIA ELEC PROD	189 B ST NEEDHAM 94 MASS	IL160		MZ	38B07	163863883	802783803	802	8191C3283	106	506G137	4536348	1115	3463545273				
MODAC 404	AIRBORNE INSTR LAB	DEER PARK LONG ISLAND NY	IC154104			20D	256	244				424J13		1013	23831213				
MODAC 410	AIRBORNE INSTR LAB	DEER PARK LONG ISLAND NY	IC155124			34D		504705705				174J134		1062	33432113				
MODAC 414	AIRBORNE INSTR LAB	DEER PARK LONG ISLAND NY	IB156154			20D	805805805	294805805	294	0020C0410052	124J13			1023	33534133				
MODAC 5014	AIRBORNE INSTR LAB	DEER PARK LONG ISLAND NY	IC154853			20B	323					204J3		H2452	12 2162				
MONROBOT MU	MONROE CAL MACH CO	555 MITCHELL ST ORANGE NJ	IL156			96B	805686776					205J2347		1234					
MONROBOT III	MONROE CAL MACH CO	555 MITCHELL ST ORANGE NJ	IS155			68D	127547547					143J37		114482	1223 13				
MONROBOT V	MONROE CAL MACH CO	555 MITCHELL ST ORANGE NJ	IS155863			68B	124544544					203J37		14482	1053 23				
MONROBOT VI	MONROE CAL MACH CO	555 MITCHELL ST ORANGE NJ	IS 55			68B	137607607					143J1347		1244					
MONROBOT IX	MONROE CAL MACH CO	555 MITCHELL ST ORANGE NJ	IC358962			62B	126136546305					921J178		1471	13721142				
MONROBOTXIX	MONROE CAL MACH CO	555 MITCHELL ST ORANGE NJ	IC259243701			32B	905346507	305286507				333J137		1214	214223821142				
NAREC	US NAVAL RESEA LAB	WASHINGTON 25 DC	GB156155		Z	48B	223454654	602454654	302802	1642C7863	114	394J234	723168A	1211	135334241283				
NATIONAL 102A	NATIONAL CASH REG	DAYTON 9 OHIO	IS353703242			42B	206376386	745256266				433J2347		113442	83832123				
NATIONAL 102D	NATIONAL CASH REG	DAYTON 9 OHIO	IS255653242			37D	785356376	405156156				433J12347		113442	83832223				
NATIONAL 107	NATIONAL CASH REG	DAYTON 9 OHIO	IB153105			37D	156406406					414J12347	202998B	113582	23 2314				
NATIONAL 303	NATIONAL CASH REG	DAYTON 9 OHIO	IC 54144422			37D		802303303	155	0090V0310		912J234		113 32	63331023				
NATIONAL 304	NATIONAL CASH REG	DAYTON 9 OHIO	IB259374572NZ			60A101	24135355	603135345	603	4801C2883	107	12347	3036448	BV34	4383441214				
NATIONAL 315	NATIONAL CASH REG	DAYTON 9 OHIO	IB150833132CNZ			100B24	23294105363		602	4002C4083	108	1234	6030847	1423					
NATIONAL 390	NATIONAL CASH REG	DAYTON 9 OHIO	IS260563142			41D	116257407		115	2000C8161	086	134T		1144	1343438113				
NORC	INT BUS MACH CORP	590 MADISON AV NY 22 NY	IS155255			54D		153313234	802	2002E1094	121	245D		B13214	3425				
NORDEN VOTE T	NORDEN DIV	3501HARBORBLVD COSTAMESA CAL	IL1160604			15D	333	662	302	6000C1022095		16		4214353431314					
NUMERICORD	CONCORD CONTRO INC	1282SOLDIERFLDR BOSTONOKMASS	ID260224						103	3340C1141081		23		4623253632253					
OARAC	GENERAL ELECTRI CO	13430BLACKCANYHWHY PHOENIXAR	IS153184			35D	8751861869	13804125				374J27		112413	73248163				
OKLAHOMA UNIVE	OKLAHOMA UNIVERSIT	NORMAN OKLA	US151		AZ	54B	113114114	302104104	402	8191E5153	101	23478	086B	0131	23332414				
ORACLE	OAKRIDGE ARGONNE	OAKRIDGE TENN ARGONNE ILL	GS160254			40B	703484594	802	183	2051E8192097		2367D	80204BG	121453	122274				
ORDFIAC	UNDERWOOD CORP	LEECOMPDIV LONG IS CITY6NY	IB154204			28D	816926976	175176226				284J1		IH3462	636381				
ORDVAC	UNIV OF ILLINOIS	DIGITAL COMP LAB URBANA ILL	UF152604		FO	40BHS	143704704		153	4101C1643	100	404J1237		1211	332392448133				
PACKARD BE 250	PACKARD BELL CORP	1905ARMACOSTAVLOSANGEL25CAL	IS360403122			22B01	114374354	123284254	155	3222C7203087		12347	2020647	1114	4223123012				
PROG DATA PR 1	DIGITAL EQUIP CORP	MAYNARD MASS	IS260114			18B	502304604	751304604		5024101C7352		357	1536447	1115	3333821123				
PROG DATA PR 2	DIGITAL EQUIP CORP	MAYNARD MASS	IL 62																
PROG DATA PR 4	DIGITAL EQUIP CORP	MAYNARD MASS	IL 62																
PENNSTAC	PENNA STATE UNIV	ELEC ENG UNIVERSITY PARK PA	US155104			37D	345535745	943305515				933J37		11A5	136063738133				
PERK I-11	AUTOMATION MGT INC	25 BRIGHAM ST WESTBORO MASS	I3460102500			03D						175P8		B 750	10 1021				
PHILCO 212	PHILCO CORPORATION	3900WELSH RD WILLOW GROVE PA	IB 62		F														
PHILCO CXPQ	PHILCO CORPORATION	3900WELSH RD WILLOW GROVE PA	IF157165			48B07453			123	4101C1973	102	794J137	153038H	1211	515312935214				
PHILCO 1000	PHILCO CORPORATION	3900WELSH RD WILLOW GROVE PA	IB156			36B		552134204		1234101C1473		1237		12	13				
PHILCO 2000	PHILCO CORPORATION	3900WELSH RD WILLOW GROVE PA	IB 57	343ZZZZ		48B32772463493	172403433	202		3282C1574	119506J1234	903AA1A	B2134	26413542323					
PHILCO 2400	PHILCO CORPORATION	3900WELSH RD WILLOW GROVE PA	IB 62																
PHILCO 3000	PHILCO CORPORATION	3900WELSH RD WILLOW GROVE PA	IS260			22B	924425425	134285285				364J3578		11A4	101343724052				
PRODAC 510	REMRAND UNIVAC DIV	STPAUL MINN WESTI PITTSBGHPAID 62																	
PRODAC 580	REMRAND UNIVAC DIV	STPAUL MINN WESTI PITTSBGHPAID 62																	
QUAC	NORTHROP AIRCR INC	NORTHROP FLD HAWTHORNE CALIF	IB254			18B						864G23		432	92232133				
RASTAC	LAB FOR ELECTRONIC	1079COMMONWEALTHBOSTON15MASS	1160204			OPT						217J37		V14121283	145133				
RASTAD	LAB FOR ELECTRONIC	1079COMMONWEALTHBOSTON15MASS	11259204			OPT						217J3578		V14121283	145133				
RAYCOM	RAYTHEON MANUFA CO	WALTHAM MASS	IC153			38D						124							
RAYDAC	RAYTHEON MANUFA CO	WALTHAM MASS	IS153305			36B	115135155	483214384	164	2181H7832	2089	27		BH4553	243423				
RCA BIZMAC I	RADIO CORP AMERICA	ELECDATAPROCSYSDIV CAMDEN2NJ	IC257455			06A		124164	203	4101C2462	2091	114J1234+		13 4342274	252434				
RCA BIZMAC II	RADIO CORP AMERICA	ELECDATAPROCSYSDIV CAMDEN2NJ	IB256455			06A		124164	203	8191C4912094	204J134			13 453	14443234				
RCA 110	RADIO CORP AMERICA	ELECDATAPROCSYSDIV CAMDEN2NJ	IL 61			24B07563734874				2044101C9802		125J8		11	43				

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RCA 200	RADIO CORP AMERICA	ELECDATAPROCSYSDIV CAMDEN2NJ	IA160			20B						0160C3200		38		10	1332	21 40
RCA 300	RADIO CORP AMERICA	ELECDATAPROCSYSDIV CAMDEN2NJ	ID160			13B	243963174	123863164	302			9211C1203	106	379		1117	5323	12 12
RCA 301	RADIO CORP AMERICA	ELECDATAPROCSYSDIV CAMDEN2NJ	IB157	204402	ECZ	OPT	214785		702			2002C6802	100	1234	7521241	BV26		348224
RCA 501	RADIO CORP AMERICA	ELECDATAPROCSYSDIV CAMDEN2NJ	IB359	594123	ECZ	OPT		334575185	153			C1974110		1234	673626A	1V2600		636153
RCA 601	RADIO CORP AMERICA	ELECDATAPROCSYSDIV CAMDEN2NJ	IB161	53132	ECZ	OPT	982143293	602103253	102			C1974123		1234	1846468	BVV3		446123
RCA 604	RADIO CORP AMERICA	ELECDATAPROCSYSDIV CAMDEN2NJ	IB 62															
RD 900	LAB FOR ELECTRIC INC	1079COMMONWEALTHBOSTON15MASS	IC 62											507J58				
READIX	JB REA CO INC	2202BROADWAY SANTAMONICA CAL	IB556	703242		35D	444256406	444166246	224			005051740059	154J12347	1021045B	1032	438	31123	
RECOMP I	AUTONETICS DIV	9150EIMPERIALHWY DOWNEYCALIF	IB156			40B	205216216	105206206				833G378			1214	2373	32 22	
RECOMP II	AUTONETICS DIV	9150EIMPERIALHWY DOWNEYCALIF	IS257	953302ZZ		40B	544116116	135126136				164G1357			B214	2314	524122	
RECOMP III	AUTONETICS DIV	9150EIMPERIALHWY DOWNEYCALIF	IS 62			40B			175			0000/00000000	164G37				60	
RECAP	AUTONETICS DIV	9150EIMPERIALHWY DOWNEYCALIF	IB160			40B	205226236	544116116				174G3578	30332	5B214	1314	624022		
RICE UNIVERSIT	RICE UNIVERSITY	HOUSTON 1 TEXAS	US161	404	Z	54B	08503853853	403753753	103			8191E4433	106	234	3230468	B1154	432314	2442
RPC 4000	ROYAL MCBEE CORP	PORT CHESTER NY	IB360	873172Z		32B	01504176176	254176176				264J12347			B1V4		729062	
RPC 9000	ROYAL MCBEE CORP	PORT CHESTER NY	IB359	124242Z		41D	1152953552	34205355	881			0770M3141096			1614		221132	
RW 300	TRWOOLRIDGE INC	8433FALLBROOKAV CANOGAPARKCA	IS559	983262ZZ		18B	784305315	784305315	215					284J2379E	2620848	1HA4	116243	521162
RW 400	TRWOOLRIDGE INC	8433FALLBROOKAV CANOGAPARKCA	IC260			26B	363803134		103			C		224J3467	104648A	1127		142123
SCRIBE	NORDEN DIV	58 COMMERCE RD STAMFORD CONN	IB 60			03D			143			6000C1022087	313J14		V14	3353	335143	
SDS 910	SCIEN DATA SYS INC	1542FIFTEENTH SANTAMONICACAL	IS162	563182F4D		24B	01163254804	802224784	802			1642C3933	107	12467	4233247	1114	001333	924013
SDS 920	SCI DATA SYSTE INC	1542FIFTEENTH SANTAMONICACAL	IT262	893252F4D		24B	01163323224	802243224	802			1642C3923	107	13467	4233247	1114	001343	132113
SDS 930	SCI DATA SYSTE INC	1542FIFTEENTH SANTAMONICACAL	IC 62															
SEAC	NAT BUR STANDARDS	CONNECTICUT-VANNESSAV WASHDC	GB150			45B	824305305	483215215	123			2051E9232096		12347	1010547	1144	23	24248133
SPEC III	COMPUTER CONTR CO	2251BARRYAV LOSANGELES64CALI	IB160	253		13B	224	133	214			1280M2081070		579		1114	3223	614032
SPEDAC 220	HAZELTINE CORP	LITTLE NECK NY	IB 62															
STORED PRO DDA	INT BUS MACH CORP	590 MADISON AV NY 22 NY	IS160			22B	223		223			2190M3361082		185		15 4	32923	11031
SWAC	NAT BUREAU STANDAR	CONNECTICUT-VANNESSAV WASHDC	GS151	404		37B	643374	532304	802			2560E1002091	822J147			1145	63	4334
SYLVANIA M64	SYLVANIA ELEC PROD	189 B ST NEEDHAM 94 MASS	ID 61		M	25B	02103703723	123723743	202402			1642C4103113	378	00	111500		432113	
SYLVANIA 59400	SYLVANIA ELEC PROD	189 B ST NEEDHAM 94 MASS	IB260	824163ACZ		37B	802433443	402393403	402			3282C1244105	237G12347	903648A	B11	4423	244224	
SYLVANIA UDOFT	SYLVANIA ELEC PROD	189 B ST NEEDHAM 94 MASS	IS160			21B		502103114	502			8191C1803106		1479		1114	235224	242224
TARGET INTER	REMRAND UNIVAC DIV	315 PARK AV NY 10 NY	IB160		DZ	24B	1032534535	502203403	282			1222C3073110		27	3030547	1117	2413	237153
TECHNITROL 180	TECHNITROL ENGINEE	22751 NORTH 4TH ST PHILA33PA	IS 55	504		48B		483325325	483			5120Q1462087		237		1144	33	34547114
TELE BID ASKED	TELEREGISTER CORP	445FAIRFIELDV STAMFORD CONN	IC153			24B							104J3					
TELE MAG IN C	TELEREGISTER CORP	445FAIRFIELDV STAMFORD CONN	IC156	304		37B							155J13					
TELE SPEDDH	TELEREGISTER CORP	445FAIRFIELDV STAMFORD CONN	IS252					153					155J					
TELE TELEFILE	TELEREGISTER CORP	445FAIRFIELDV STAMFORD CONN	IC 57			03D	164803803	803	163			1502C5102090	516M1234+	1235446	J 14	3324		
TELE UNI AIR	TELEREGISTER CORP	445FAIRFIELDV STAMFORD CONN	IC356				176	103					135J3478			543	33	82
TELEQUOTE II	TELEREGISTER CORP	445FAIRFIELDV STAMFORD CONN	IC 62															
TIM II	LAB FOR ELECTRIC INC	75 PITTS ST BOSTON 14 MASS	IC 54	253		41D		155155155	705303	0011C0340	048885J	347				1114	22	231321
TRW CM 403	TRWOOLRIDGE INC	8433FALLBROOKAV CANOGAPARKCA	IT 61															
TRW 130	TRWOOLRIDGE INC	8433FALLBROOKAV CANOGAPARKCA	IB162															
TRW 330	TRWOOLRIDGE INC	8433FALLBROOKAV CANOGAPARKCA	IM 62		Z		264					1003						
TRW 340	TRWOOLRIDGE INC	8433FALLBROOKAV CANOGAPARKCA	ID162			28B	163464474	802454464	802			1602C4643	118425J	1237+		711	4002363	131113
TRW 530	TRWOOLRIDGE INC	8433FALLBROOKAV CANOGAPARKCA	II 62															
UDEC I II III	BURROUGHS CORP	6071SECONDAV DETROIT 32 MICH	IB255	504		34D	224405605	134395595	883			1000C3401076	184J2347			12V433	633442	
UNDERWOOD DATA	UNDERWOOD CORP	ONE PARK AV NY 16 NY	II 62									0160C0960		1347				
UNIVAC DIG TR	REMRAND UNIVAC DIV	315 PARK AV S NY 10 NY	I2 22	353		15B	01243134134	802	252802	5120C7682095		378				1115	001353	724042
UNIVAC FILE 0	REMRAND UNIVAC DIV	315 PARK AV S NY 10 NY	IC457	304432		41D	865246286	125166206				116J12347	1031047	1136			742324	
UNIVAC FILE 1	REMRAND UNIVAC DIV	315 PARK AV S NY 10 NY	IC457	304422		72A	865246286	125166206	904			0200C1441062	116J12347	1031047	1136		741334	
UNIVAC LARC	REMRAND UNIVAC DIV	315 PARK AV S NY 10 NY	IB160	605144ZZ		41D	4028022834	028022834	402			9752C3984120	726J2345	2534048	B113		354315	
UNIVAC S S 80	REMRAND UNIVAC DIV	315 PARK AV S NY 10 NY	IB459	354602YZ		35D	03145135135	853	122			827J1247	2531047	1126	229244	449214		

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A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
UNIVAC S S 90	REMRAND UNIVAC DIV315 PARK AV S NY 10 NY	IB459354602YZ	35D03145135135853											817J124	2531047	1126229244	145173		
UNIVAC STEP	REMRAND UNIVAC DIV315 PARK AV S NY 10 NY	IB460174352YZ	35D03145135135853											817J124	2531047	1126229244	145173		
UNIVAC 60	REMRAND UNIVAC DIV315 PARK AV S NY 10 NY	IB 55753901										0060V2040		1		I 3423	4133		
UNIVAC 120	REMRAND UNIVAC DIV315 PARK AV S NY 10 NY	IB255973112										4040120V4200		1		I 34	834133		
UNIVAC 490	REMRAND UNIVAC DIV315 PARK AV S NY 10 NY	IC161155 Z	30B	1035238432	10403723202						3282C9823	117397J1247	2531248	1	17		34		
UNIVAC 1000	REMRAND UNIVAC DIV315 PARK AV S NY 10 NY	IM 61	J	24B01123564684						701302	6911T1663	114	389E	000		1115003314	321091		
UNIVAC 1004	REMRAND UNIVAC DIV315 PARK AV S NY 10 NY	IM 62533132		06A 184897477						802	9610C5862	109	14						
UNIVAC 1020	REMRAND UNIVAC DIV315 PARK AV S NY 10 NY	IM 61	J	24B01123174224						701302	7681T1843	114	2389E			71115003314	221051		
UNIVAC 1101	REMRAND UNIVAC DIV315 PARK AV S NY 10 NY	IB155504		24B						502264324	103	4101C9832	100394J37			111133	23143324		
UNIVAC 1102	REMRAND UNIVAC DIV315 PARK AV S NY 10 NY	IS255145		24B						173264344			204J367			11 33	33241233		
UNIVAC 1103	REMRAND UNIVAC DIV315 PARK AV S NY 10 NY	IS353294		36B	443244494	283224474	802			1232C4423	107594J12347					B12543	93749244		
UNIVAC 1103A	REMRAND UNIVAC DIV315 PARK AV S NY 10 NY	IS353115		36B	443244494	283224474	802			1232C4423	107594J12347					B12553	63749244		
UNIVAC 1105	REMRAND UNIVAC DIV315 PARK AV S NY 10 NY	IS359195333	ZZZZ	36B	603124514	363114474	802			1232C4413	107125J12347	2532448	B125831324	253374					
UNIVAC 1107	REMRAND UNIVAC DIV315 PARK AV S NY 10 NY	IB 62225	ACFZ	36B15402133313	801702243	301				6552C2364	121237J12347	1241248	B 17	34 23					
UNIVAC 1206	REMRAND UNIVAC DIV315 PARK AV S NY 10 NY	IT 61594	ZZ	30B07163733114	962733114	362802				3282C9833	114197J13457	1341248	B1115001444	331123					
UNIVAC I	REMRAND UNIVAC DIV315 PARK AV S NY 10 NY	IS3511754133		36B						103	2051C7372	099	1237				5352		
UNIVAC II	REMRAND UNIVAC DIV315 PARK AV S NY 10 NY	IB358974193		41D	534225405	284185375	224			1001H4082	090	12347				I21453	24844224		
UNIVAC III	REMRAND UNIVAC DIV315 PARK AV S NY 10 NY	IB360704133	CWZ	41D	164175305	124175305	403			2001C8162	093	1234				I214531324	152224		
UNIVERSAL D TR	US NAVAL RESEA LAB WASHINGTON 25 DC	GB160354		24B15902134204	902194204	102				3282C7863	119966J1234	1343249	11A6			741324			
VERDAN	AUTONETICS DIV 9150EIMPERIALHWY DOWNEYCALIF	IS457		24B	164	803205205						403G378				I124	131432	81	
WEDILOG	WWANG LABORATPRIES CAMBRIDGE 41 MASS	IS154203		17D		105105105						167				1 762	2223	42	
WESTING AIRB	WESTINGHOUSE ELEC AIRARMDIV BOX746 BALTO 3 MD	IS260		24B03302203403	102203403	501				5121C1113	116	8				01471115	832423	22	
WHIRLWIND I	MASS INST TECHNOL DIG COMP LAB CAMBRIDGE31MASS	US150		16B	153343643	802233473	102702			6141C9832	110594J237A					I11514	14156224		
WHIRLWIND II	MASS INST TECHNOL DIG COMP LAB CAMBRIDGE31MASS	US150		16B	223383713	802233473	702702			6141C9832	101594J2345	3910446				I11714	14254244		
WHITESAC	COMPUTER RESE CORPNAT CASH REG DAYTON 9 OHIO	11		37D		156406406					345J17					I12492	531472		
WISC	UNIV WISCONSIN	DEPTOFELECENG MADISON 6 WIS	US254									102435M				013423	421441		
WRU SEARCH SEL	WESTERN RESER UNIV	CENDOCOMRES CLEVELAND6 OHIO	US158									34							

V. CONCLUSIONS

1. If ASDEC is maintained, improved, and perhaps raised to a slightly higher order of sophistication, it can very well prove to be an effective tool for selecting and evaluating computing systems for specific applications from the national pool of existing or available systems, both from the standpoint of physical acquisition or temporary usage.
2. Accomplished once and for all, ASDEC could eliminate the need for preparing a chart of comparative characteristics every time each organization seeks to acquire a computing system for any application. This can be a very time consuming task. If kept up to date, an ASDEC chart provides a good starting point for preparing a computer applications study.
3. ASDEC actually is a condensation or digest of the pertinent data contained in rather bulky survey reports, conveniently tabulated, and displayed in a minimum of space, particularly suited for automatic selection and evaluation.
4. The hit-and-miss procedure of comparing characteristics, quite a soul-searching task can be eased, reduced to a minimum, or eliminated through the use of ASDEC.

<p>AD <u>Accession No.</u> Ballistic Research Laboratories, AFG AUTOMATIC SELECTION OF DIGITAL ELECTRONIC COMPUTERS (ASDEC) Martin H. Weik, Violet J. Confer and Ralph R. Rosenberg BRL Report No. 1176 October 1962</p> <p>DA Proj No. 503-06-002 UNCLASSIFIED Report</p> <p>Engineering and programming condensed descriptions of 327 electronic digital computing and data processing systems in the United States are given in a set of comparative charts, automatically prepared from a deck of punched cards. A method for automatic selection and evaluation of computing and data processing systems is described.</p>	<p>AD <u>Accession No.</u> Ballistic Research Laboratories, AFG AUTOMATIC SELECTION OF DIGITAL ELECTRONIC COMPUTERS (ASDEC) Martin H. Weik, Violet J. Confer and Ralph R. Rosenberg BRL Report No. 1176 October 1962</p> <p>DA Proj No. 503-06-002 UNCLASSIFIED Report</p> <p>Engineering and programming condensed descriptions of 327 electronic digital computing and data processing systems in the United States are given in a set of comparative charts, automatically prepared from a deck of punched cards. A method for automatic selection and evaluation of computing and data processing systems is described.</p>
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